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(71) Applicant *(for all designated States except US)*: **MOMO DESIGN s.r.l.** [IT/IT]; Via G. Meda, 45, I-20141 Milano (IT).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)*: **CATTANEO, Paolo Piergaspare** [IT/IT]; Via Frank, 32, I-27100 Pavia (IT).

(74) Agent: **MITTLER, Enrico**; MITTLER & C. s.r.l., Viale Lombardia, 20, I-20131 Milano (IT).

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(54) Title: CUSTOMIZABLE FASTENER FOR A VISOR TO A MOTORCYCLE CRASH HELMET

(57) Abstract: A fastener (1) for a visor (2) to a motorcycle crash helmet (3), including a decorative element (4) which may be selected by the user and a fastening element (5) provided with a plurality of openings (7) through which the underlying decorative element (4) may be seen from the outside.

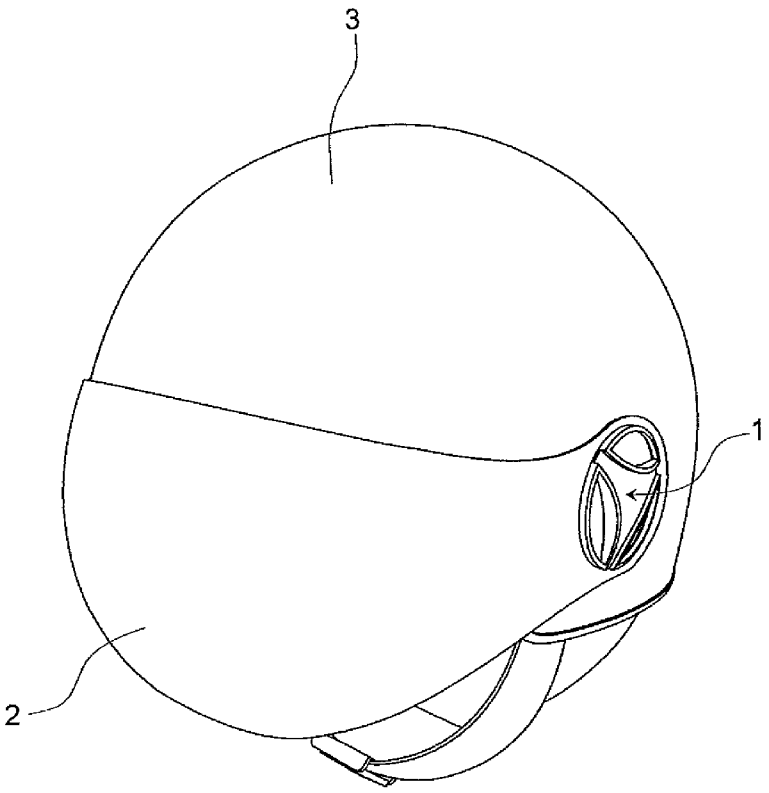


Fig.1

WO 2009/013281 A1

NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *with international search report*

"Customizable fastener for a visor to a motorcycle crash helmet".

* * *

DESCRIPTION

The present invention relates to a fastener for a visor to a motorcycle crash helmet with the possibility to aesthetically customize such a device.

The customization of the helmet may appear to be only an aesthetical matter. However, both for obvious hygienic reasons and for reasons which go beyond technical fields into psychological ones, this understandable requirement may arise, especially when one's crash helmet is to be deposited in a cloakroom in a public place and it is desirable to avoid mixing up helmets.

The user therefore requires a crash helmet which has excellent technical features, is achieved by an industrial process, and furthermore may immediately be recognized among many, the typical counterpoint between mass production on one side and individual customization requirements of the product on the other side arising again.

Customization solutions for crash helmets are known at an individual and not at an industrial level, even if often by means of, so to say, empirical solutions, which in brief include applying internal or external labels, attaching external artificial elements such as reproductions of animal ears made of synthetic coat, various colourings obtained by means such as indelible markers or aspecific enamels.

Regardless of the artistic result which is more or less creative depending on the user's imagination, the perplexity upon the duration and consequences of such interventions remains, the interventions usually being carried out with materials which are not dedicated and which may aesthetically damage the crash helmet (e.g. because of the incomplete removal of the customizing decoration by wear), if not in a long term even structurally because of incompatibility between the materials for the decoration and the plastic material of the crash helmet.

Furthermore, some solutions do not solve the problem of immediately identifying one's own crash helmet, such as for instance internal labels, which, among other things, are deteriorated by using the crash helmet.

Solutions such as airbrushing the crash helmet are expensive professional interventions, unless they are not made by amateurs with all of the advantages and drawbacks.

If creative solutions are dismissed and plain and professional alternatives are to be sought, the "factory-made" customization is the only possibility, although it is nothing but a small compromise between mass production and customization. However, this latter solution is not yet available on the market in the above disclosed terms.

It is the object of the present invention to provide a plain "factory-made" customization for a motorcycle crash helmet.

In accordance with the invention, such an object is achieved by means of a fastener for a visor to a motorcycle crash helmet, characterised in that it includes a decorative element which may be selected by the user and a fastening element provided with a plurality of openings through which the underlying decorative element may be seen from the outside.

These and other features of the present invention will become more apparent from the following detailed description of an embodiment thereof, shown by no way of limitation in the accompanying drawings, in which:

Figure 1 shows an axonometric view of a crash helmet with a visor with a fastener according to the present invention;

Figure 2 shows a section view of the fastener mounted on the crash helmet with a visor;

Figure 3 shows an exploded view of Figure 2;

Figure 4 shows an axonometric view of the crash helmet with an exploded view of the fastener;

Figure 5 shows a helmet, a visor and a fastener in a partially assembled condition;

Figure 6 shows three models of openings of the fastening element and three models of decorative element in combination.

Figure 1 shows a fastener 1 assembled to fasten a visor 2 on a crash helmet 3. On the other hand, Figure 3 shows an exploded view of the fastener 1 consisting of a fastening element 5, a disc-shaped decorative element 4, a first positioning element 9 and a second positioning element 10.

As shown in Figure 6, the fastening element 5 is provided with openings 7 through which the underlying decorative element 4 may be seen from outside, and the configuration and possibly the number of openings 7 may be selected by the user of the crash helmet 3. Portions corresponding to the decorative element 4, displaying an image or colour chosen by the user and/or selectable from a plurality of materials, may be seen thereunder. This allows to customize and thereby immediately identify one's own crash helmet. The combination between the selectable configuration of the fastener 5 and the selectable decorative element 4 allows a further customization degree, thus allowing to reciprocally multiply the possibilities of customization selection. In this manner, in virtue of the customization, the possibility is reduced of two users mixing up their two crash helmets which are of the same model and colour. The crash helmet may also be customized depending on whether it is worn by a female or a male.

With reference now to the remaining figures, the embodiment shown displays the circular fastening element 5 and the openings 7 of the fastening element 5 in a number of three, having the same shape and arranged symmetrically with respect to the centre of the circular fastening element 5. A threaded pin 6 integral with the fastening element 5 is placed centrally thereto. Said threaded pin 6 is engaged in a corresponding cavity 8 placed on the crash helmet 3 for assembling the visor 2.

The pin 6 may be provided with a male threading and the cavity 8 may be provided with a female threading.

A positioning element 9 with a central hole 21 and an O-ring 10 housed

in an annular groove 20 of the positioning element 9 are interposed between the crash helmet 3 and the visor 2.

Figures 2, 4 and 5 specifically show the assembly sequence of the crash helmet 3 and the visor 2, which features the resting of the positioning element 9 on the crash helmet 3, centring the cavity 8 on the crash helmet 3 on the central hole 21 of the element 9. The O-ring 10 is placed in the groove 20 of the element 9. The visor 2 is placed above, taking care that the fastening holes on the visor 2 correspond to the cavity 8. The decorative element 4 and the element 5 are assembled on the visor 2, the element 5 being fastened so as to engage the pin 6 in the cavity 8 of the crash helmet 3, advantageously threaded complementarily to the cavity 8.

It is clear that the crash helmet 3 may feature both fasteners 1 of the crash helmet in a customizable version.

CLAIMS

1. A fastener (1) for a visor (2) to a motorcycle crash helmet (3), characterised in that it includes a decorative element (4) which may be selected by the user and a fastening element (5) provided with a plurality of openings (7) through which the underlying decorative element (4) may be seen from the outside.
2. A fastener (1) according to claim 1, characterised in that it includes at least one pin (6) integral with the fastening element (5), said pin (6) being engaged in a cavity (8) corresponding to the crash helmet (3) for fastening the visor (2) to the crash helmet (3).
3. A fastener (1) according to claim 2, characterised in that the pin (6) is threaded in order to be engaged in the complementarily threaded cavity (8) in the crash helmet (3).
4. A fastener (1) according to any one of the preceding claims, characterised in that the decorative element (4) is a disc and is made of different materials which may be selected by the user of the crash helmet (3) for the aesthetical customization of the crash helmet (3) that allows an easy identification by the user.
5. A fastener (1) according to any one of the preceding claims, characterised in that the decorative element (4) features different images, which may be selected by the user of the crash helmet (3) for an aesthetical customization of the crash helmet (3) that allows an easy identification by the user.
6. A fastener (1) according to any one of the preceding claims, characterised in that the openings (7) of the fastening element (5) are arranged according to reciprocally different models which may be selected by the user of the crash helmet (2) to combine the decorative element (4) and the fastening element (5) which customizes and further identifies the crash helmet (3).
7. A fastener (1) according to any one of the preceding claims,

characterised in that the fastening element (5) is circular and the openings (7) of the fastening element (5) are in the number of three, have the same shape and are arranged symmetrically with respect to the centre of the circular fastening element (5).

8. A fastener (1) according to any one of the preceding claims, characterised in that said device (1) is used to fasten both sides of the visor (2) to the crash helmet (3).

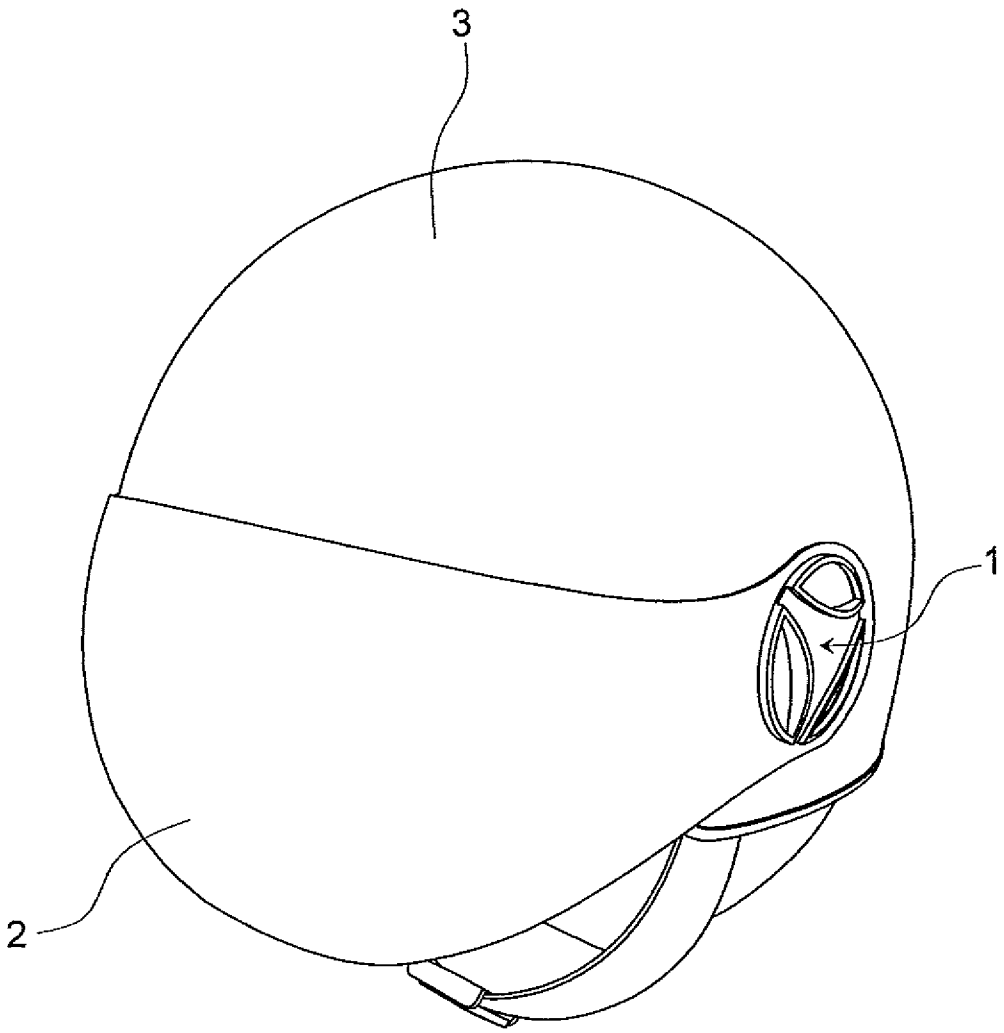


Fig.1

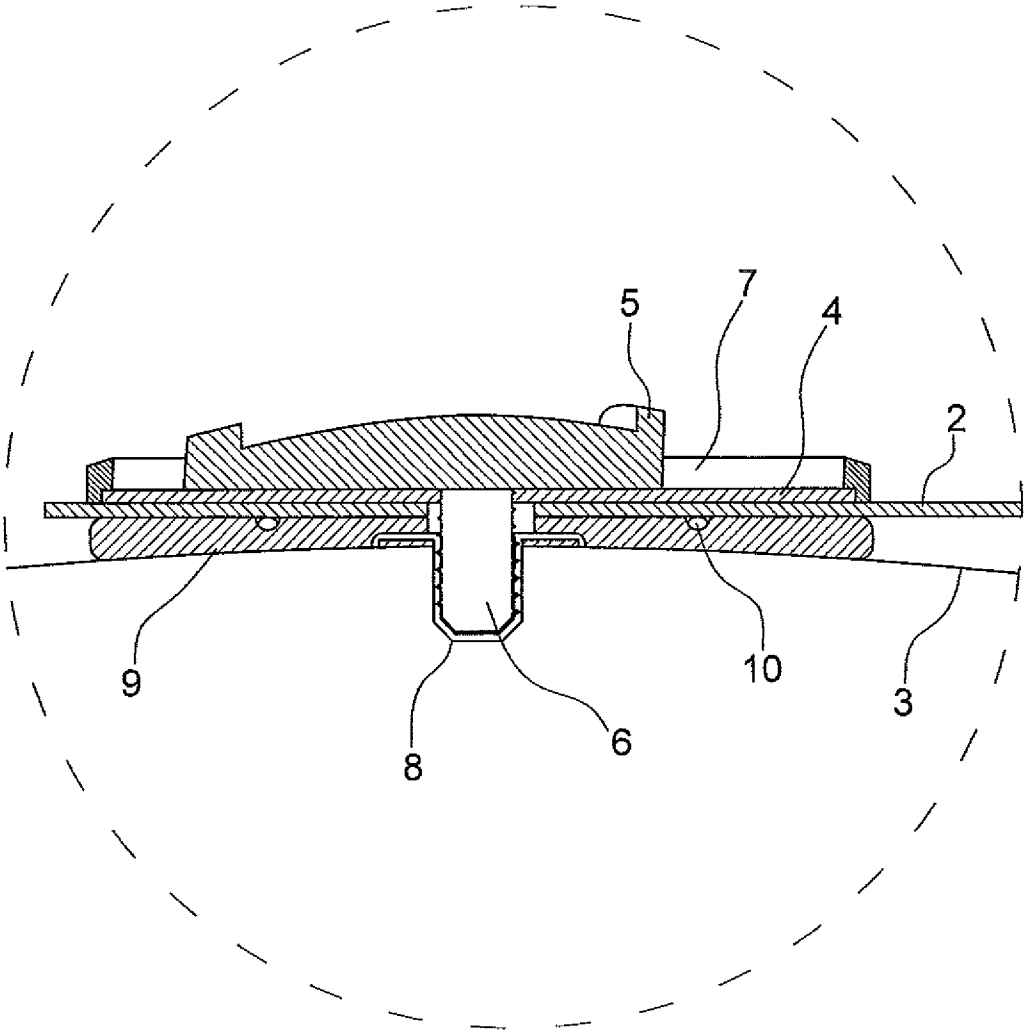


Fig.2

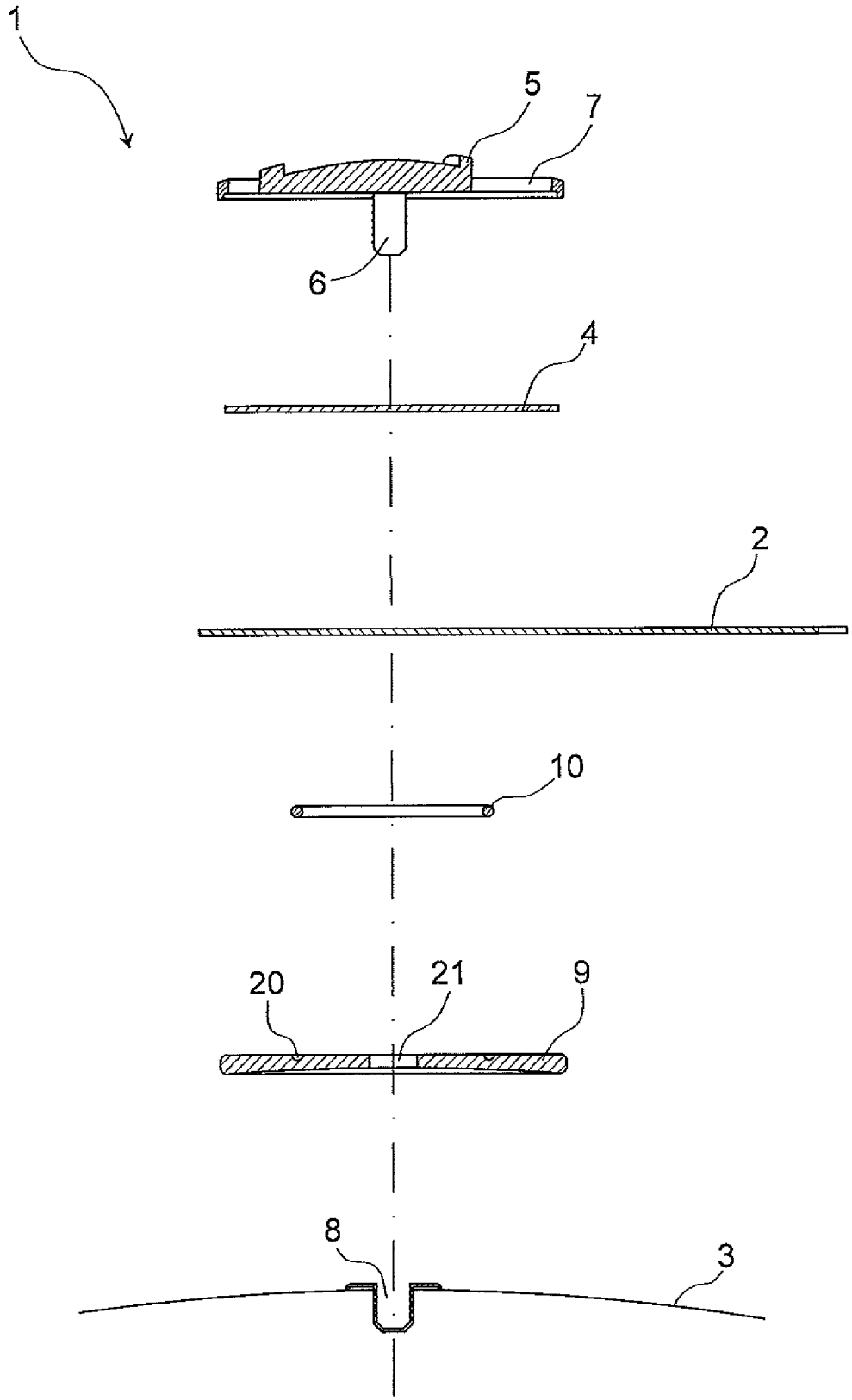


Fig.3

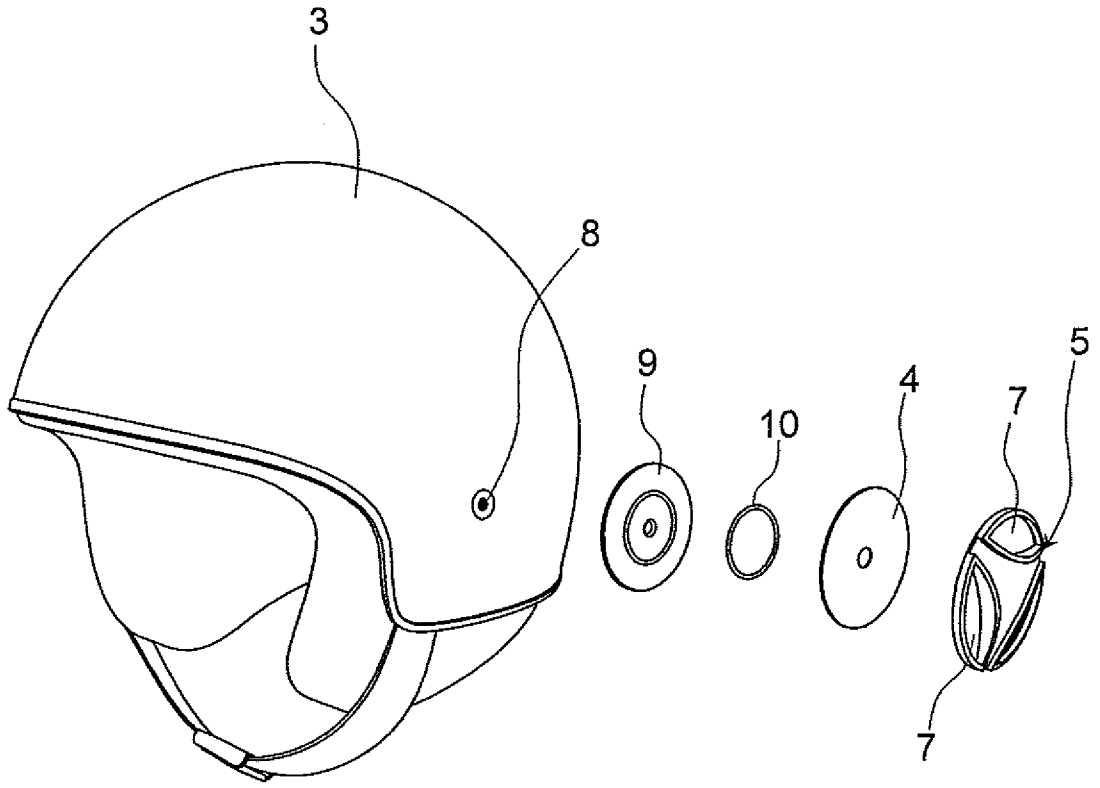


Fig.4

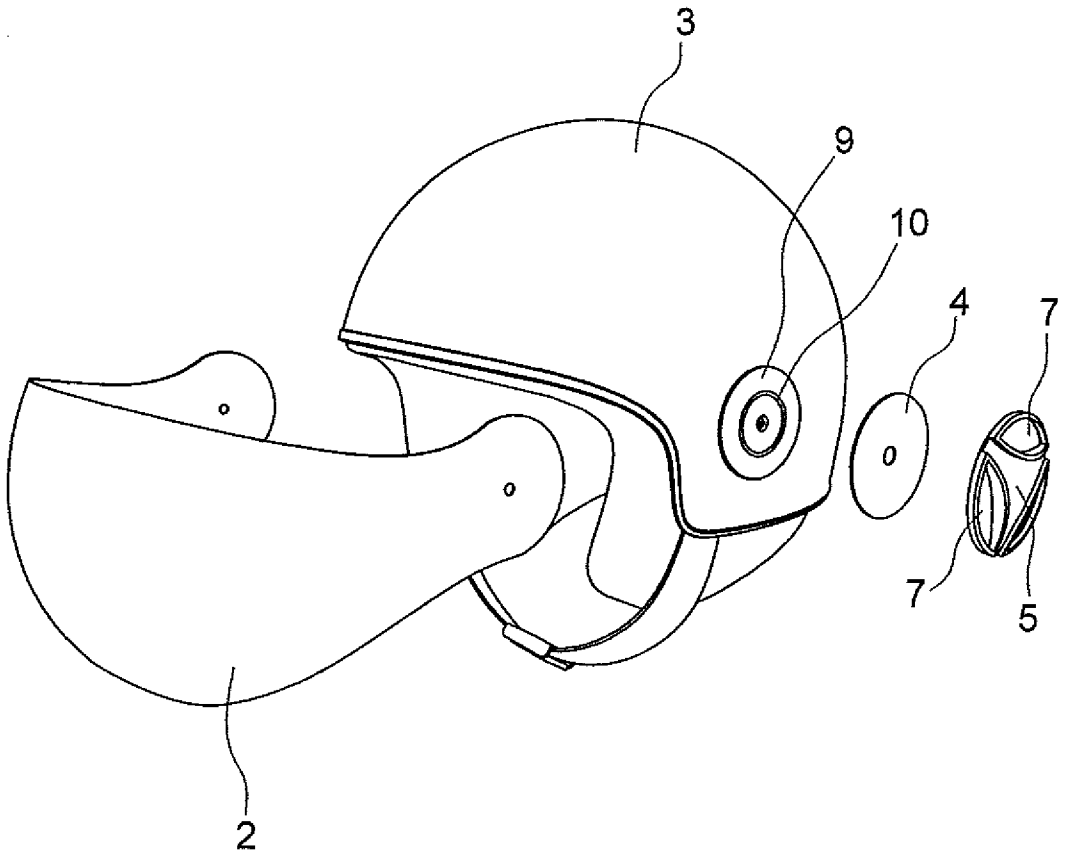


Fig.5

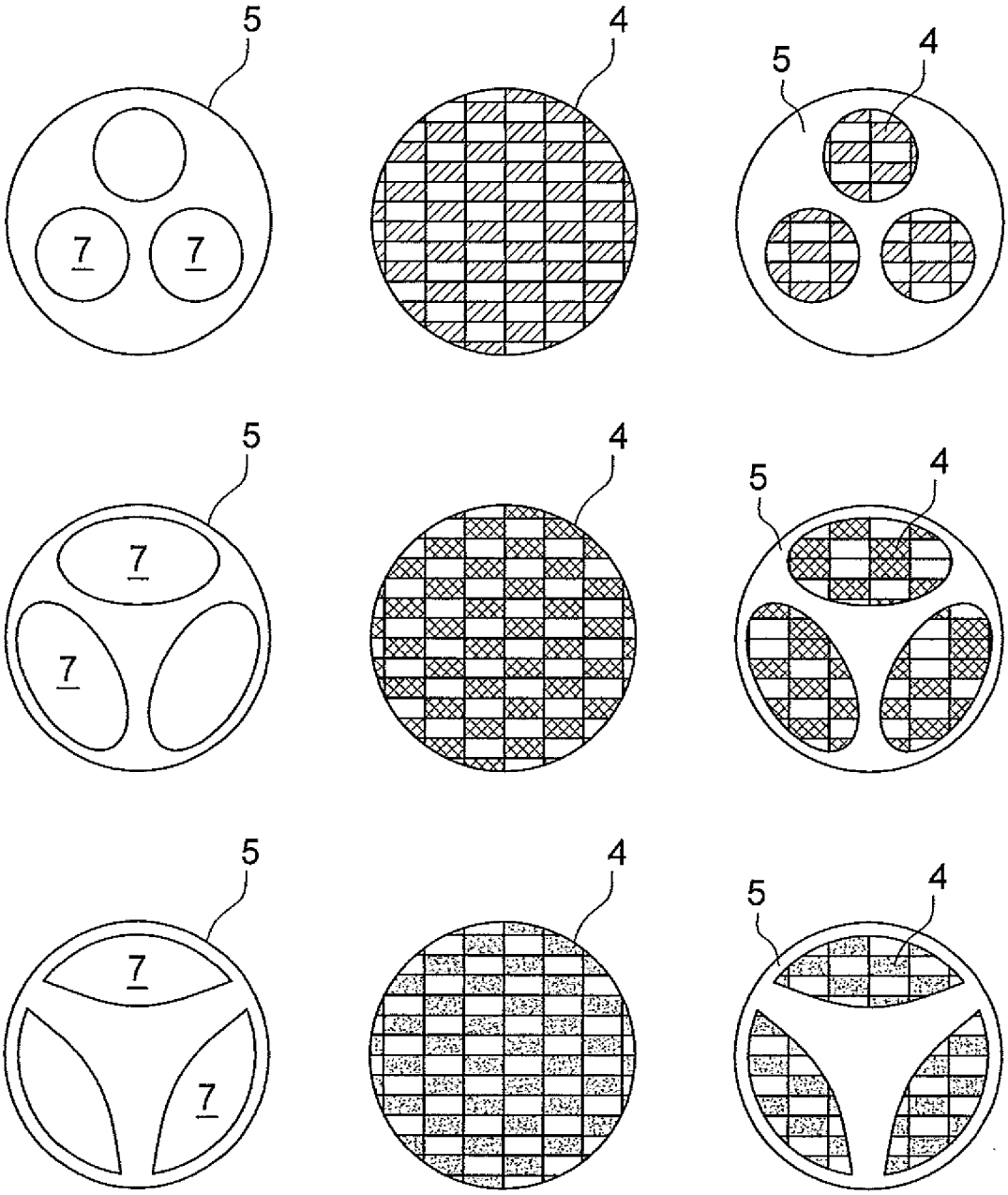


Fig.6

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2008/059564

A. CLASSIFICATION OF SUBJECT MATTER
INV. A42B3/04 A42B3/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A42B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 718 559 B1 (DAVIDSON HOWARD [US]) 13 April 2004 (2004-04-13) column 9, line 4 - line 53; figures 2,12	1,4-6
A	GB 2 175 490 A (NOLAN SPA NOLAN SPA [IT]) 3 December 1986 (1986-12-03) page 2, line 45 - line 68; figures 5,6	1
A	US 6 751 805 B1 (AUSTION KENNETH [US]) 22 June 2004 (2004-06-22) column 10, line 27 - line 43; figure 8	1

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

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Date of the actual completion of the international search	Date of mailing of the international search report
22 October 2008	30/10/2008

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Fax: (+31–70) 340–3016	D'Souza, Jennifer

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/EP2008/059564

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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